We Claim:

1. A method for detecting, preventing, and/or treating a condition requiring regulation of trophoblast invasion comprising modulating TGFβ3, receptors of cytokines of the TGFβ family, HIF-1 α, or oxygen tension.

2. A method for diagnosing in a subject a condition requiring regulation of trophoblast invasion comprising detecting TGF-β3, receptors of cytokines of the TGFβ family, or HIF-1α in a sample from the subject.

3. A method for diagnosing increased risk of preeclampsia in a subject comprising detecting TGF-β_3 in a sample from the subject.

4. A method as claimed in claim 3 which comprises (a) collecting a sample from the subject; (b) measuring the levels of TGF-β_3 in the sample; and (c) comparing the levels of TGF-β_3 in the sample to the levels in women with normal pregnancies.

5. A method as claimed in claim 4 wherein the levels of TGF-β_3 are measured in a sample from the subject during the first trimester of pregnancy.

6. A method of regulating trophoblast invasion comprising inhibiting or stimulating TGF-β_3, receptors of cytokines of the TGFβ family, HIF-1α, or oxygen tension.

7. A method for increasing trophoblast invasion in a subject comprising administering an effective amount of an inhibitor of (a) TGF-β_3, (b) receptors of cytokines of the TGFβ family, or (c) HIF-1α.

8. A method as claimed in claim 7 wherein the inhibitor is antisense to TGFβ$_3$ or antisense to HIF-1α.

9. A method as claimed in claim 7 wherein the inhibitor is an antibody to TGFβ$_3$.

10. A method as claimed in claim 7 wherein the inhibitor is decorin, fetuin, α_2-macroglobuliln, or thyroglobulin, or peptides derived from sites on the compounds that bind to TGFβ3.

11. A method for reducing trophoblast invasion in a subject comprising administering an effective amount of (a) TGF-β_3, (b) receptors of cytokines of the TGFβ family, (c) HIF-1α, or (d) a stimulator of (a), (b), or (c).

12. A method for treating a woman suffering from, or who may be susceptible to preeclampsia comprising administering therapeutically effective dosages of an inhibitor of (a) TGF-β_3, (b) receptors of cytokines of the TGFβ family, or (c) HIF-1α.

13. A method for monitoring or treating choriocarcinoma in a subject comprising administering therapeutically effective dosages of (a) TGFβ$_3$, (b) a receptor of cytokines of the TGFβ family, (c) HIF-1α and/or (d) stimulators of (a), (b) or (c).

14. A method for evaluating a compound for its ability to regulate trophoblast invasion comprising the steps of:

(a) reacting TGFβ$_3$ and a receptor of a cytokine of the TGFβ family, and a test substance, wherein the TGFβ$_3$ and receptor of a cytokine of the TGFβ family, are selected so that they bind to form a ligand-receptor complex; and

(b) comparing to a control in the absence of the substance to determine if the substance stimulates or inhibits the binding of TGFβ$_3$ to the receptor and thereby regulates trophoblast invasion.

15. A method for evaluating a substance for its ability to regulate trophoblast invasion comprising the steps of:

(a) reacting TGFβ$_3$, HIF-1α, and a test substance, wherein the TGFβ$_3$ and HIF-1α bind to form a TGFβ$_3$-HIF-1α complex; and

(b) comparing to a control in the absence of the substance to determine if the substance stimulates or inhibits the binding of TGFβ$_3$ to HIF-1α and thereby regulates trophoblast invasion.

16. A receptor complex comprising TGFβ R-I (ALK-1)-TGFβ RII-endoglin.

17. A composition for regulating trophoblast invasion comprising an inhibitor of (a) TGF-β_3, (b) receptors of cytokines of the TGFβ family, or (c) HIF-1α in an amount effective to reduce trophoblast invasion, and a carrier, diluent or excipient.

18. A composition as claimed in claim 17 wherein the inhibitor is antisense to TGFβ$_3$ or antisense to HIF-1α.

19. A composition as claimed in claim 17 wherein the inhibitor is an antibody to TGFβ$_3$.